

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-13. (canceled)

14. (currently amended) A method of fabricating an electrochemical device component structure, the method comprising:

forming a laminate of

—— an active metal electrode,

—— a polymer electrolyte, and

—— a protective interlayer between the electrode and the polymer electrolyte, the interlayer comprising a material conductive to ions of the active metal and chemically compatible with the active metal and the polymer electrolyte, and the material selected from the group consisting of nitrides, phosphides and halides of the active metal and precursors thereof;

—— wherein the forming of the laminate comprises:

—— (a) forming applying a layer of a material selected from the group consisting of a protective interlayer material or a precursor for a protective interlayer material on the polymer electrolyte, wherein the protective interlayer material and precursors are selected from the group consisting of active metal nitrides, active metal phosphides, and active metal halides, non-active metal nitrides, non-active metal phosphides, non-active metal halides, red phosphorus, amines, phosphines, borazine ($B_3N_3H_6$), and triazine ($C_3N_3H_3$) on a polymer electrolyte; and

(b) applying an active metal to the protective interlayer layer of the material or precursor for the protective interlayer material on the polymer electrolyte;

whereby the active metal nitride, active metal phosphide or active metal halide material, or a reaction product formed by contact of the active metal with the non-active metal nitride, non-active metal phosphide, non-active metal halide, red phosphorus, amine, phosphine, borazine ($B_3N_3H_6$) or triazine ($C_3N_3H_3$) provides a protective interlayer conductive to ions of the active metal between the active metal and the polymer electrolyte.

15-16. (canceled)

17. (currently amended) The method of claim 14, wherein the active metal comprises an anode, and further comprising applying a current collector on a surface of the active metal ~~electrode~~ anode opposite that in contact with the protective interlayer.

18. (currently amended) The method of claim 14, wherein the active metal of the anode is selected from the group consisting of alkali metals, alkaline earth metals, ~~transition metals~~ and alloys thereof.

19. (original) The method of claim 14, wherein the active metal of the anode is an alkali metal or alloy thereof.

20. (original) The method of claim 19, wherein the active metal of the anode is lithium or a lithium alloy.

21. (currently amended) The method of claim 14, wherein ~~a precursor for a~~ the protective interlayer ~~material is~~ the material applied to the polymer electrolyte, ~~and the precursor is converted to a corresponding protective interlayer material when reacted with the subsequently applied active metal.~~

22. (currently amended) The method of ~~claim 14~~ claim 21, wherein the protective interlayer ~~is precursor~~ is the reaction product formed by contact of the active metal with the material applied to the polymer electrolyte selected from the group consisting of metal nitrides, red phosphorus, amines, phosphines, borazine ($B_3N_3H_6$), triazine ($C_3N_3H_3$), and metal halides.

23. (currently amended) The method of claim 22, wherein the ~~precursor~~ material applied to the polymer electrolyte is red phosphorus, the active metal is lithium, and the protective interlayer ~~material~~ formed on reaction with the active metal is Li_3P .

24. (currently amended) The method of claim 23, wherein the ~~precursor~~ material applied to the polymer electrolyte and active metal are applied by evaporation.

25. (currently amended) The method of claim 22, wherein the ~~precursor~~ material applied to the polymer electrolyte is selected from the group consisting of metal nitrides.

26. (currently amended) The method of claim 25, wherein the ~~precursor~~ material applied to the polymer electrolyte is selected from the group consisting of Cu_3N , SnN_x , and SiN_x .

27. (currently amended) The method of claim 26, wherein the ~~precursor~~ material applied to the polymer electrolyte is Cu_3N is applied by evaporating copper in a nitrogen plasma and the active metal is applied by evaporation.
28. (original) The method of claim 27, wherein the active metal is lithium applied by evaporation.
29. (canceled)
30. (currently amended) The method of claim 21 ~~claim 29~~, wherein the protective interlayer material is selected from the group consisting of active metal nitrides, active metal phosphides, and active metal halides.
31. (original) The method of claim 30, wherein the protective interlayer material is Li_3N , and the active metal is lithium.
32. (original) The method of claim 31, wherein the Li_3N is applied by evaporating lithium in a nitrogen plasma and the active metal is applied by evaporation.
- 33-36. (canceled)